

Formula for NFL Passer Rating

The NFL passer rating formula includes four variables: completion percentage, yards per attempt, touchdowns per attempt, and interceptions per attempt.

Each of those variables is scaled to a value between 0 and 2.375, with 1.0 being statistically average (based on league data between 1960–1970).

The four separate calculations can be expressed in the following equations:

$$a = \left(\frac{COMP}{ATT} - .3 \right) \times 5$$

$$b = \left(\frac{YDS}{ATT} - 3 \right) \times .25$$

$$c = \left(\frac{TD}{ATT} \right) \times 20$$

$$d = 2.375 - \left(\frac{INT}{ATT} \times 25 \right)$$

where

ATT = Number of passing attempts

COMP = Number of completions

YDS = Passing yards

TD = Touchdown passes

INT = Interceptions

If the result of any calculation is greater than 2.375, it is set to 2.375. If the result is a negative number, it is set to zero.

Then, the above calculations are used to complete the passer rating:

$$\text{Passer Rating} = \left(\frac{a + b + c + d}{6} \right) \times 100$$

Passer rating in the **NFL** is on a scale from 0 to 158.3.